AMENDMENTS TO THE SPECIFICATION:

Page 3, amend paragraph [0019] as:

[0019] As shown in Figure 3, a substrate 10 is provided, and a buffer layer 20 is formed on substrate 10 using metal organic chemical vapor deposition (MOCVD), molecular beam epitaxy (MBE), or liquid phase epitaxy (LPE). The present invention uses the MOCVD method. The same MOCVD method is used to form an n-type GaN layer 30 on top of buffer layer 20, an light-emitting layer 40 on top of n-type GaN layer 30, a p-type GaN layer 50 on top of light-emitting layer 40, and a digital penetration layer 100 on top of p-type GaN layer 50. Figure 4 shows the cross-sectional view of digital penetration layer 100. Digital penetration layer 100 is made of $Al_xIn_yGa_{1-x-y}N_zP_{1-z}$ and $Al_pIn_qGa_{1-p-q}N_rP_{1-r}$ with increasing (10Å-90Å) and decreasing (90Å-10Å) thickness, respectively, where $0<x,y,z,p,q,r<1$. The conductivity type of the digital penetration layer 100 can be p-type, n-type or I-type. When the light-emitting layer emits light with wavelength between 380nm and 560nm, the optical transmittancy of the digital penetration layer is greater than 80%

Page 4, amend paragraph [0022] as:

[0022] ITO layer 110 formed on top of digital penetration layer 100 is used as the first ohmic contact electrode because it is a p-type ohmic contact and with high optical transmittancy to improve the external quantum efficiency. An n-type ohmic contact layer is formed with the one of the aforementioned methods in the n-metal forming area 60 to be used as a second ohmic contact electrode 80. Because the ICP-RIE etching terminates

at the light-emitting layer, there will be imperfection, which absorbs the free carriers and ~~reduce~~ reduces the equivalent surface density. In addition, due to the surface vacant area, there is no carrier between the p/n junction area in spite of the existence of InGaN tunnel. On the other hand, n-metal forming area 60 is electroplated with a layer of Ti/Al. Because InGaN forms with Ti/Al an ohmic contact, which has a lower ohmic contact impedance than that of an ohmic contact formed by N-GaN with Ti/Al, a low-impedance ohmic contact is formed with the aid of the aforementioned imperfection. Also, because the dry etching does not etch as deep as conventional GaN-based light-emitting diodes, the lateral impedance is smaller and the operating voltage can be reduced.

Page 6, amend paragraph [0028] as:

[0028] A two-step dry etching method of a multi-step dry etching method is then used to etch downward. The first step etching etches downward digital penetration layer 100, p-type GaN layer 50, and light-emitting layer 40. The etching terminates at light-emitting layer 40. At the end of the etching, an n-metal forming area 60 is formed. The second step etching etches downward part of n-metal forming area 60, light-emitting layer 40, and n-type GaN layer 30 to form a trench 61. The width of the trench 61 is approximately 0.2 mm. The present invention uses a dry etching method of ICP-RIE. An ITO layer 110 is formed on top of digital penetration layer 100 using e-gun vaporation, sputtering, or thermal-resistance evaporation. ITO layer 110 formed on top of digital penetration layer 100 is used as the first ohmic contact electrode because it is a p-type ohmic contact and with high optical transmittancy. The present invention uses sputtering deposition. As shown in figure 6B, ITO layer 110 formed with the sputtering deposition method can

have the thickness of 100Å-20000Å, while the preferred thickness of the present invention is 1000Å-4000Å.